Atty Dkt. No.: AREN-011CON (11.US12.CON)

USSN: 10/782,596

AMENDMENTS TO THE CLAIMS:

Please amend the claims as shown below. A complete listing of the claims, including their current status, is set forth below.

1-30. (Cancelled)

31. (New) A method of screening comprising:

contacting a G protein-coupled receptor (GPCR) with a candidate compound, wherein said GPCR is encoded by a nucleic acid capable of hybridizing under stringent conditions to the complement of the nucleotide sequence of SEQ ID NO:19, wherein said stringent conditions comprise a wash in 0.1 X SSC at 65 °C, and wherein said GPCR is constitutively active; and

determining whether said candidate compound inhibits or stimulates said GPCR.

- 32. (New) The method of claim 31, wherein said GPCR comprises the amino acid sequence of SEQ ID NO:20.
- 33. (New) The method of claim 31, wherein said GPCR comprises the amino acid sequence of SEQ ID NO:20, except for a substitution of lysine for glycine at amino acid residue 285 of SEQ ID NO:20.
- 34. (New) The method of claim 31, wherein said GPCR is part of a fusion protein.
- 35. (New) The method of claim 31, wherein said method comprises determining whether said candidate compound is an agonist of said GPCR.
- 36. (New) The method of claim 31, wherein said method comprises determining whether said candidate compound is an inverse agonist of said GPCR.
- 37. (New) The method of claim 35 or 36, further comprising formulating said candidate compound as a pharmaceutical.

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38. (New) The method of claim 31, wherein said GPCR is present on a host cell or an isolated membrane thereof.

- 39. (New) The method of claim 38, wherein said host cell comprises an expression vector encoding said GPCR.
- 40. (New) The method of claim 38, wherein said host cell is a mammalian host cell.
- 41. (New) The method of claim 38, wherein said host cell is a yeast host cell.
- 42. (New) The method of claim 31, wherein said determining comprises detecting or measuring a second messenger of said GPCR.
- 43. (New) The method of claim 38, wherein said host cell comprises a cAMP-responsive reporter system.
- 44. (New) The method of claim 31, wherein said determining comprises measuring binding of GTPγS to a membrane comprising said GPCR.
- 45. (New) The method of claim 31, further comprising employing said candidate compound to identify a cell in the *substantia nigra*.